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ABSTRACT

Faced with high rates of student attrition, Santa Barbara Community College (SBCC) established a committee to assess the effectiveness of the college's support services; review research on student retention; and recommend ways of improving student success through academic skills assessment, student academic advisement, articulation and coordination of support services, and integration of academic skills assessment into the instructional program. The committee offered recommendations regarding assessment, advisement, early warning and coordination of support services, institutional fit, and college honors. The following recommendations were implemented: (1) beginning in fall 1983, all full-time students or students who wish to enroll in reading, writing, English as a Second Language (ESL) or certain math classes have been assessed in reading, writing, and math skills; (2) new students are assigned to group advising sessions prior to registration, and students on academic or progress probation are required to have counseling; (3) short courses in reading, writing, study skills, and other areas have been developed, and a referral form and directory was prepared; (4) activities and programs were developed to improve the match between the college's goals, programs, structure, environment, and expectations and the needs and expectations of students; and (5) honors courses were drafted. Studies conducted since the implementation of these recommendations showed a general improvement in certain classes and lower attrition rates. Grade and attrition data are appended. (HB)

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ASSESSMENT, ADVISING AND EARLY WARNING: STRATEGIES FOR IMPROVING RETENTION

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ASSESSMENT, ADVISING AND EARLY WARNING: STRATEGIES FOR IMPROVING RETENTION

INTRODUCTION

Santa Barbara City College has a history of concern for meeting individual student needs, evidenced by a variety of programs and services designed to enhance student success. These programs include services such as special counseling, tutoring, financial aid, EOPS, basic skills, study skills, individualized learning labs, and a learning disabilities program. However, in 1982, attrition was a serious problem. Unnecessary attrition from courses and from the college is extremely costly. As a result, early in Spring Semester, 1982, the Superintendent/President and Dean of Instruction formed a broad-based College Readiness Committee composed of faculty, administrators, and a student representative. The committee was charged with reviewing the effectiveness of SBCC's support programs, reviewing research on student retention and recommending ways to improve student success and retention through academic skills assessment, student academic advisement, articulation and coordination of support services, and integration of academic skills development into the full instructional program of the college.

Starting in February, 1982, the College Readiness Committee met weekly. The members approached this complex charge in the following manner: First, research on student retention in community colleges

and four-year institutions was reviewed. Next, current practices and attitudes at Santa Barbara City College were surveyed. Finally, a document recommending overall goals, specific action objectives, persons responsible, and a timeline for implementation was produced.

The College Readiness Committee Report, "Assessment, Advising and Early Warning: Strategies for Improving Student Academic Success at Santa Barbara City College," was then presented to the college community for discussion, May, 1982. Plans for implementation were endorsed that fall.

RECOMMENDATIONS

The recommendations, covering five areas, reflected what research showed were necessary practices for good student retention.

Assessment

Because an assessment and placement process did not exist at SBCC, many students placed themselves in classes in which they had little chance for success. The review of the literature pointed out that an increasing number of community colleges were providing assessment programs designed to place incoming students in appropriate classes and developmental assistance for those who needed it. At Southwestern College, a 1976 study reported that although motivational and socio-economic factors were related more strongly to dropout rates (where a student completely leaves school), skill factors were more strongly associated with class persistence and success. Reading level was highly correlated with performance or survival in 93% of the

subject areas. (17) At Sacramento City College the effective use of an assessment/placement process plus some curriculum revision significantly increased the retention of college students. (11)

At SBCC, the purposes of establishing an Assessment Program were to enhance student success, improve retention, assist students to make good choices about courses and careers, and save the taxpayers, students, and the college time and money. The Committee recommended assessment of reading, writing, and math skills prior to registration for all new students enrolling in eight or more units and for all students planning to enroll in English, English as a Second Language, or certain math classes. In order to accomplish the objective, a sub-committee was formed to (1) establish procedures for an Assessment Program; (2) select assessment instruments; (3) provide assessment at high schools; (4) establish skills level prerequisites for all content classes; and (5) evaluate all components of the Assessment Program.

Advisement

A national survey entitled "What Works in Student Retention" (National Center for Higher Education Management Systems, 1980) solicited information on the types of programs, new or modified, that were introduced on college campuses specifically to improve retention. Most often mentioned was improvement of academic advising, followed by special orientation activities, exit interviews, special counseling programs, early warning systems, and new academic support services. (6) Miami Dade Community College (2) reported that a high priority was given to improvement of the advisement process, including additional funds, computer support, and involvement of faculty. A 1980 Research

Report from UCLA recommended mandatory orientation, advising, and follow-up counseling during the academic year. (1) Based on the research review, the College Readiness Committee agreed upon the following recommendations:

1. Provide mandatory preregistration advisement to all students enrolled in 8 or more units or who seek a degree/certificate.
2. Require an orientation session for first-time college students.
3. Involve faculty on a voluntary basis in academic advisement at registration and at group counseling sessions. Assign declared majors to faculty in the major area, providing inservice training to those individual faculty who volunteer to act as advisors.
4. Provide comprehensive career counseling services.

Early Warning and Coordination of Support Services

Friedlander (9) indicated that students who drop courses often do so because of academic problems, whereas students who withdraw completely from college do so mainly for non-academic reasons, such as financial, employment, moving, ill health, and personal problems. Miami-Dade (2) has established an Early Warning System which requires faculty to indicate on the class roster the academic and attendance progress of each student during the seventh week of the term. This faculty response, combined with other student background information, is fed into the computer, which then generates an individualized

letter to each student offering encouragement, suggestions for improvement, and referrals to campus resources.

The College Readiness Committee felt that the college had an obligation to identify as early as possible students who are experiencing difficulty and refer them to appropriate support services. The following recommendations were made:

1. Identify entering students with skill deficiencies through the assessment program and student self-reporting on an entering student survey form. High risk students would be referred to the counseling center and to other appropriate support programs.
2. Establish a summer bridge program for entering students who are deficient in basic skills.
3. Require faculty members to make a sixth-week progress report on every student enrolled in their classes. Computer-generated letters should be sent to students with difficulties informing them of their progress.
4. Schedule additional study skills, career planning and basic skills classes to begin halfway into the term.
5. Monitor academic progress at the end of each semester.
6. Provide referral forms and a directory of student support services to each faculty member.

Institutional Fit

Breckel and Mackie (7) define institutional fit as "the match between the institution (including its goals, programs, structure, environment, and expectations) and student needs and expectations."

When prospective students are provided with clear and accurate information about their skills levels, the college and its expectations, they are able to make more realistic decisions. In order to improve Institutional Fit at SBCC, the College Readiness Committee recommended the following:

1. Incorporate information outlining sample student budgets (including books, transportation, housing, child care, etc.), study time required outside of class, and hours recommended for work/units enrolled into the Student Handbook, Schedule of Classes and College Catalog.
2. Request all instructors to provide a syllabus describing course expectations to students and the Instruction Office.
3. Publish a glossary of college terminology.
4. Develop an orientation program for both hourly and new instructors.
5. Identify buildings and post directories on main floors.
6. Survey evening students to determine the desirability of providing more support services at night, and if days/times of class offerings best meet their needs.

Honors

In Fall, 1982, the Honors Subcommittee recommended the following:

1. Revise the catalog statement on the Honors program to reflect a college-wide thrust.
2. Establish Honors course criteria to be submitted to the Curriculum Advisory Committee.

3. Encourage departments to offer Honors courses, including interdisciplinary alternatives.
4. Provide greater recognition of Honors students and academic scholarship recipients during graduation ceremonies.
5. Send letters of recognition to SBCC and local high school Honors students from the Superintendent/President.
6. Investigate, in conjunction with the Foundation, the establishment of scholarship programs for SBCC Honors students.
7. Investigate the establishment of an Honors Professorship trust to encourage well-known experts in various academic areas to come to SBCC on a one-year basis to teach.

IMPLEMENTATION

The Politics

At SBCC the Superintendent/President wrote a statement of committment and appointed a broad-based committee made up of faculty members from various academic and vocational-occupational disciplines, the directors of the Reading Program, Writing Lab, English as a Second Language Program, Disabled Student Services, Financial Aid, and EOPS, the Dean of Student Services, Assistant Dean of Instruction, Coordinator of Student Development, and counselors.

Even with top administrative and broad-based support, some problems and questions arose. Who was responsible for the project?

New lines of cooperation between student services and instruction made total responsibility unclear. Who was to be responsible for the implementation of each specific objective? Once budget and staff needs were determined, how would they be funded? Once students were assessed, should the placement be voluntary or mandatory? If placement was mandatory, would the college offer the necessary skill-building classes? If not, would the college simply deny access to underprepared students? Was the counseling staff large enough to respond to the new recommendations? Could Data Processing implement the proposals, especially in the areas of assessment, early warning, and evaluation? Was the college willing to provide the resources (computer, staff, money) to evaluate the project on an on-going basis?

The Specifics

Assessment. Beginning Fall, 1983, all students enrolling in eight or more units or who wished to enroll in reading, writing, ESL, or certain math classes were assessed in reading, writing, and math skills. Special arrangements were made for students with learning disabilities.

Writing, ESL, and math placements are mandatory; reading placements are strongly recommended. Advisory skills eligibility levels for all content courses are published in the Schedule of Classes.

A certificated instructor in reading was given sixty (60) per cent released time to serve as the Assessment Specialist. With an Assessment Team composed of an Assessment Technician, certificated instructors in English, ESL and math, a counselor, and student clerical workers, a great deal of time and effort was initially spent planning the details of the assessment program.

Assessment is offered prior to registration every semester on campus and at each of the area high schools in the Spring. The tests selected determine the model. The English test consists of a thirty-five minute reading comprehension test (Stanford Diagnostic Reading Test, Blue Level, Form A) and a thirty minute essay, holistically scored by English Department faculty. For math, students have three test options, depending on their backgrounds:

1. College Board Computation Placement Test (25 minutes)
2. Algebra Preliminary Exam, U.C. Mathematics Diagnostic Test (45 minutes)
3. Pre-calculus Exam, U.C. Mathematics Diagnostic Test (90 minutes)

The ESL test is composed of 100 items sampled from the textbooks used in levels one through five. Students with diagnosed learning disabilities are given untimed tests by the Learning Disabilities Specialist.

Students must have an eligibility card when they register or add a class.

To continue in the program, students in reading and writing classes are given departmental exit exams. Students in the math and ESL programs must have teacher recommendations. For the English/Essential Skills, ESL and math programs, a new effort at articulation of objectives between levels became essential.

Advisement. Given the size of the counseling staff, the recommendation to require advisement for all new students enrolling in eight or more units proved unrealistic. However, new students are

assigned to group advising sessions prior to registration. All students on academic or progress probation are required to have counseling appointments. To date, some faculty members have participated at registration and several departments have taken an active role in advising majors. Although the orientation is not yet closely tied in with the testing and group advising, a slide/tape orientation presentation was developed in Fall, 1983.

Early Warning and Coordination of Support Services. Because Data Processing could not implement the Early Warning System, the plans are lying dormant.

The coordination of Support Services Subcommittee accomplished its tasks. A Referral Form and Directory was published and distributed to all faculty. Short courses in reading, writing, study skills, personal development, and career planning are offered halfway into the semester. Study skills adjunct classes for specific content areas are offered each semester, including study skills for the UCSB/SBCC Transition Program. The EOPS Program has developed a Summer Bridge program.

Institutional Fit. All of the recommendations were implemented by Fall, 1983, except for the requirement that all faculty submit a detailed course outline to the instruction office. This recommendation will be implemented Spring, 1984.

Honors. The honors subcommittee, now an on-going college committee, is currently drafting criteria for honors courses.

PRELIMINARY RESULTS

Two studies have been conducted and others are in progress. The first study (Miller & Esch, 1984) was to evaluate the effects of the Assessment/Placement Program on student classroom performance and attrition. The effect on student performance was evaluated by comparing the grade distributions in English, Essential Skills, ESL, and Math classes between Fall Semester, 1982 and Fall, 1983 using the chi-square statistic. Fourth week to end of semester attrition was compared between Fall, 1982 and Fall, 1983 semesters when the change in assessment procedures took place.

Overall the statistics are favorable. In math and some English classes, general improvement in grade performance occurred. (See Tables 1 and 2). With respect to attrition, there were notable drops in attrition in Fall, 1983. (See Figures 1 and 2). However, the college experienced an overall drop in attrition of about one-fourth in Fall, 1983, perhaps due to the institution of a ten-dollar per course drop fee. Percent attrition college-wide in 1982 was 26.7% compared to 21.2% in Fall, 1983.

Maureen McGrath-McGuire, in her study "Attrition at Santa Barbara City College," found that the strongest predictors of positive academic success and retention in college, Spring 1983 to Fall 1983, were high scores on the Stanford Diagnostic Reading Test and the students' stated academic and vocational goals. Other important variables were hours worked and full-time versus part-time student status. McGrath-McGuire's study reinforced the efforts of the College Readiness Committee.

Currently, the evaluation of the Essential Skills classes is concentrating on several factors: gains in student skills, retention in classes, retention in college, performance in subsequent classes.

DISCUSSION

After the first year of implementation of the SBCC College Readiness Committee's recommendations, cautious optimism may be expressed. Preliminary evaluation results indicate that attrition in math and English classes has been reduced. However, this finding may be confounded by the newly instituted ten-dollar per course drop fee which went into effect at the same time. Performance in most Math and some English/Essential Skills classes has improved.

Instruction and Student Services are working cooperatively to implement the recommendations made by the Readiness Committee. However, it is essential that follow-up, on-going evaluation be conducted to determine the effects of the Assessment/Placement, Advising, and Developmental Programs.

TABLE I

ENGLISH/ESSENTIAL SKILLS GRADE DISTRIBUTIONS,
FALL '82 AND FALL '83

E S 1-4Z	BASIC SKILLS	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
CREDIT		58	69	63.10	0.552	
NON-CREDIT		7	9	7.62	0.252	
W		26	21	28.29	1.877	
TOTALS		91	99		2.680	Not Significant

E S 20-25Z	ESL	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
A		90	99	104.94	0.336	
B		114	118	132.92	1.674	
C		89	119	103.77	2.235	
D		35	48	40.81	1.267	
F		47	60	54.80	0.494	
W		89	97	103.77	0.442	
TOTALS		464	541		6.448	Not Significant

E S 30Z	ESL TRANSITION	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
CREDIT		14	26	21.30	1.035	
NON-CREDIT		5	4	7.61	1.712	
W		4	5	6.09	0.194	
TOTALS		23	35		2.941	Not Significant

E S 34Z	ESL TRANSITION	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
CREDIT		42	45	37.27	1.604	
NON-CREDIT		20	10	17.75	3.381	
W		9	8	7.99	0.000	
TOTALS		71	63		4.986	Not Significant at .05

E S 40Z	READING	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
CREDIT		44	79	71.33	0.824	
NON-CREDIT		7	17	11.35	2.814	
W		15	11	24.32	7.294	
TOTALS		66	107		10.932	$p < .005$

TABLE I (CONTINUED)

E S 442 WRITING	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
CREDIT	99	129	110.07	3.255	
NON-CREDIT	15	18	16.68	0.105	
W	38	22	42.25	9.706	
TOTALS	152	169		13.065	p<.005

ENGLISH 1 ENG. COMP.	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
A	137	209	160.89	14.388	
B	259	288	304.16	0.858	
C	148	177	173.81	0.059	
D	19	33	22.31	5.119	
F	44	38	51.67	3.617	
W	173	171	203.16	5.092	
TOTALS	780	916		29.134	p<.001

ENGLISH 90 COLLEGE READING	FALL 82	FALL 83	EXPECTED	CHI-SQ	
A	15	18	18.65	0.023	
B	28	31	34.82	0.419	
C	16	20	19.90	0.001	
D	2	2	2.49	0.095	
F	3	8	3.73	4.885	
W	14	18	17.41	0.020	
TOTALS	78	97		5.443	Not Significant

ENGLISH 10 WRITING	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
CREDIT	179	180	151.33	5.433	
NON-CREDIT	46	39	38.89	0.000	
W	79	38	66.79	12.407	
TOTALS	304	257		17.841	p<.001

TABLE II

MATH GRADE DISTRIBUTIONS, FALL '82 AND FALL '83

MATH 1	FALL 82	FALL 83	EXPECTED	CHI-SQ.
A	248	319	231.61	32.969
B	147	143	137.29	0.238
C	45	23	42.03	8.614
D	0	0	0.00	0.000
F	35	39	32.69	1.219
W	418	310	390.38	16.551
TOTALS	893	834		59.592 $p < .001$

MATH 3	FALL 82	FALL 83	EXPECTED	CHI-SQ.
CREDIT	31	39	33.38	0.945
NON-CREDIT	25	42	26.92	8.443
W	22	3	23.69	18.072
TOTALS	78	84		27.460 $p < .001$

MATH 7	FALL 82	FALL 83	EXPECTED	CHI-SQ.
A	54	73	44.03	19.065
B	93	86	75.83	1.365
C	101	97	82.35	2.607
D	47	28	38.32	2.779
F	52	36	42.40	0.965
W	162	95	132.08	10.411
TOTALS	509	415		37.193 $p < .001$

MATH 9	FALL 82	FALL 83	EXPECTED	CHI-SQ.
A	6	7	4.98	0.815
B	8	13	6.65	6.074
C	10	8	8.31	0.011
D	2	4	1.66	3.291
F	7	2	5.82	2.503
W	32	20	26.58	1.631
TOTALS	65	54		14.326 $p < .025$

TABLE II (CONTINUED)

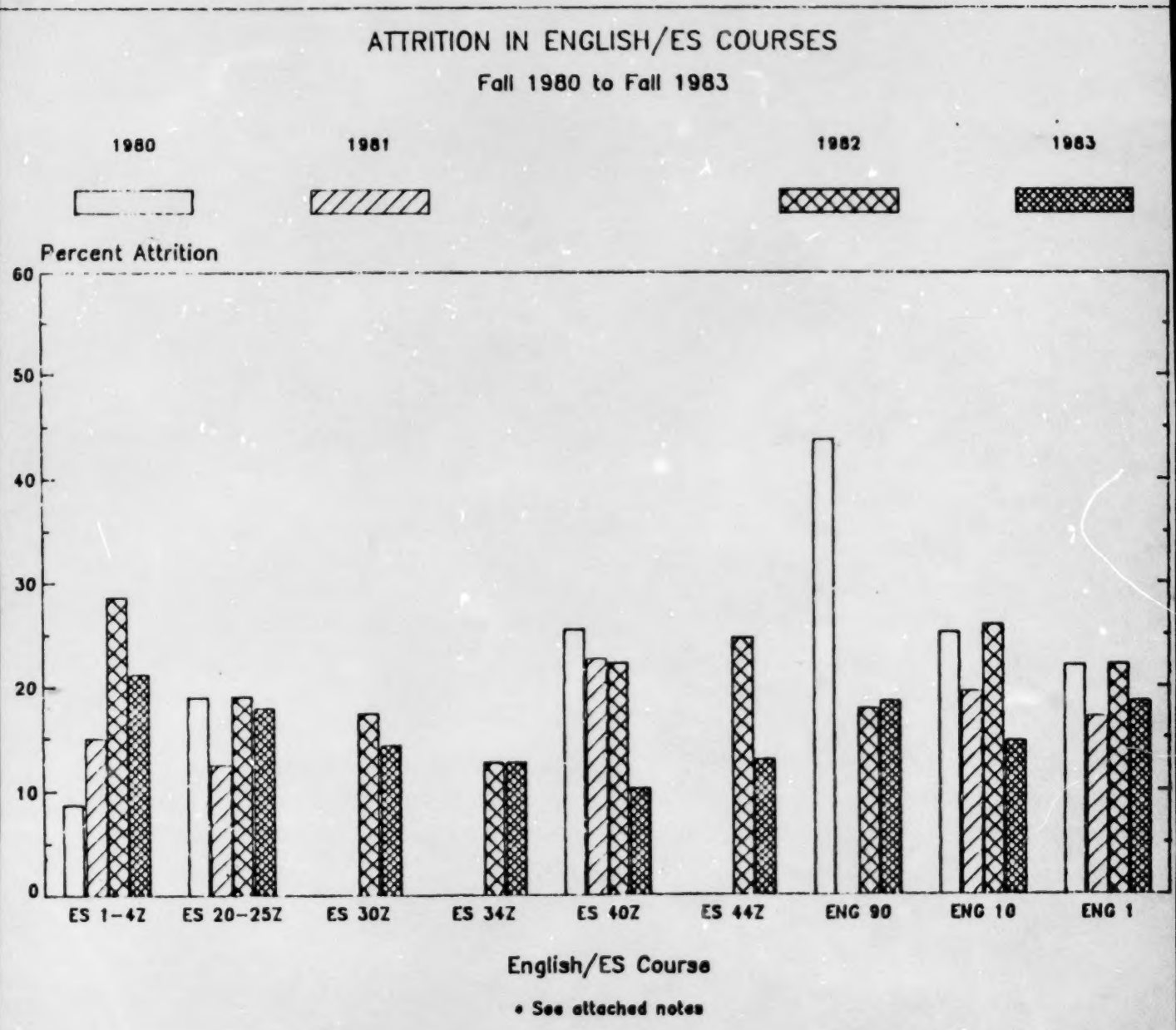
MATH 11	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
A	23	56	28.17	27.493	
B	43	73	52.67	7.850	
C	47	55	57.57	0.114	
D	29	27	35.52	2.043	
F	27	31	33.07	0.130	
W	89	74	109.01	11.243	
TOTALS	258	316		48.873	$p < .001$

MATH 13	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
A	4	14	2.94	41.690	
B	7	10	5.14	4.600	
C	13	18	9.54	7.496	
D	8	5	5.87	0.130	
F	14	2	10.28	6.666	
W	48	20	35.23	6.587	
TOTALS	94	69		67.168	$p < .001$

MATH 17	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
A	8	8	5.97	0.689	
B	17	12	12.69	0.038	
C	20	15	14.93	0.000	
D	6	4	4.48	0.051	
F	4	1	2.99	1.321	
W	16	13	11.94	0.093	
TOTALS	71	53		2.192	Not Significant

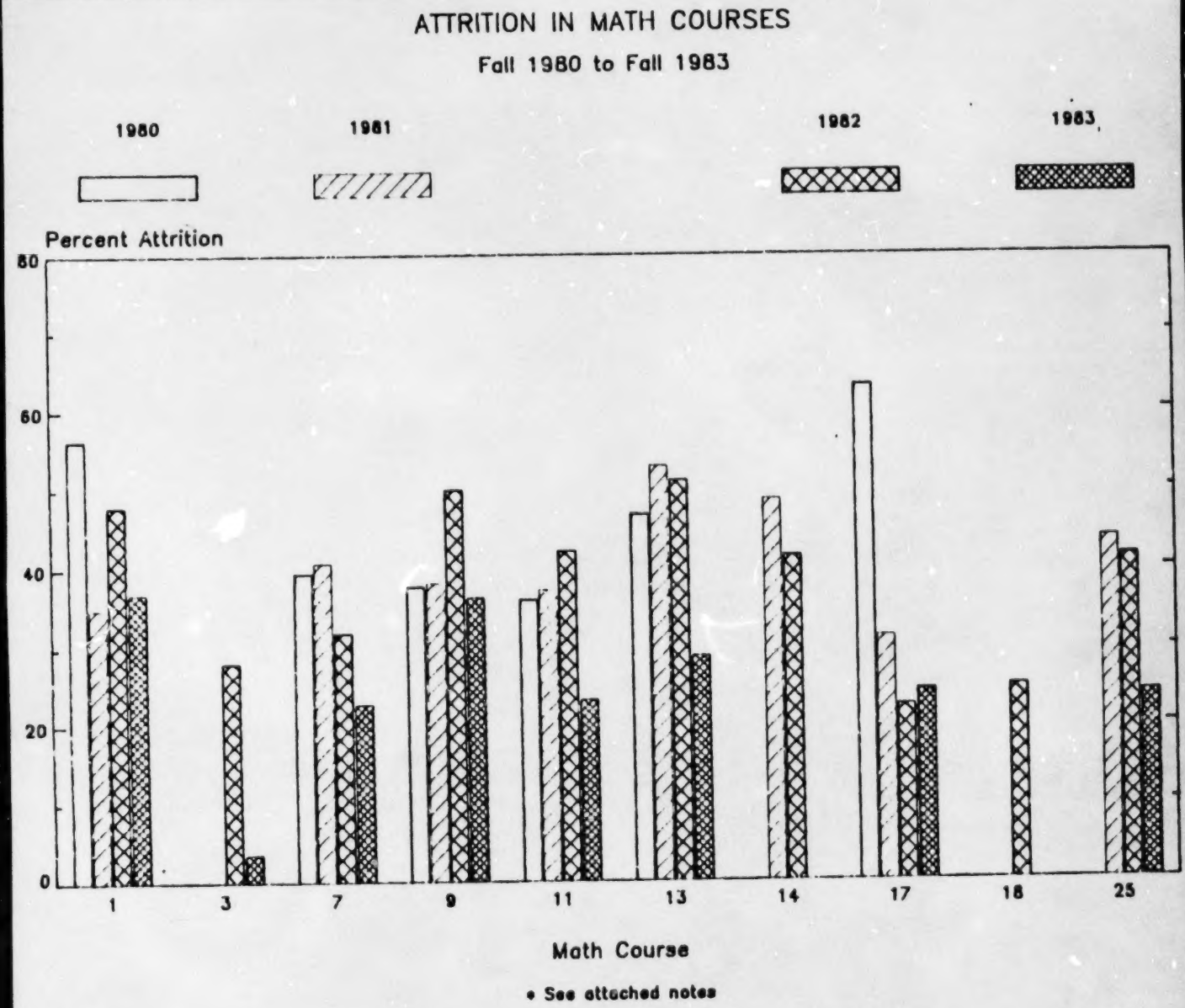
MATH 25	FALL 82	FALL 83	EXPECTED	CHI-SQ.	
A	19	18	13.35	1.621	
B	30	34	21.08	7.924	
C	33	24	23.18	0.029	
D	11	15	7.73	6.842	
F	21	13	14.75	0.208	
W	81	33	56.91	10.044	
TOTALS	195	137		26.668	$p < .001$

FIGURE 1. ATTRITION IN ENGLISH/ESSENTIAL SKILLS CLASSES



• See attached notes

FIGURE 2. ATTRITION IN MATH CLASSES



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